

Experience—Is it the Chicken or the Egg?

THE WORLD OF WORK HAS MORPHED FROM AN ERA OF APPRENTICES INTO A 21ST CENTURY INTERDEPENDENT BUSINESS CHAIN THAT DEPENDS UPON LAND, LABOR AND CAPITAL PLUS TECHNOLOGY, LEADERSHIP AND CONTINUOUS LEARNING—HUMAN CAPITAL—TO SURVIVE IN A RAPIDLY CHANGING, GLOBAL ENVIRONMENT.



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WE LIVE IN CHALLENGING TIMES—particularly for young people trying to enter the job market. Many find themselves in a Catch-22; they cannot get a job without “experience” and they cannot get experience without a job. What is a solution to this age-old dilemma? What are *you*, the teacher, to do? In the early part of the 20th century and beyond, Prosser’s 16 theorems guided our work (Prosser and Allen, 1925). But they may not be enough for our students and us today.

If your students were born in the 1990s, they can expect to be active in careers beyond 2060. But they have to get the first job to get on the career ladder. Many young people in the 19th century faced the same dilemma and began their career as apprentices, first assisting a mentor craftsman and then gradually performing the tasks until they demonstrated the necessary level of skill. The pay was low and the hours were long—but it was a way to get a foot on the first rung of the career ladder.

The world of work has morphed from an era of apprentices into a 21st century interdependent business chain that depends upon land, labor and capital plus technology, leadership and continuous learning—human capital—to survive in a rapidly changing, global environment. American education in Adam Smith’s era began as a part of contextualized public education—reading, writing and arithmetic—but science, technology, engineering, and mathematics (STEM) had overlaid the “3-Rs” by the late 20th century. Vocational education reformed with the passage of the Smith-Hughes Vocational

Education Act (1917) through Carl D. Perkins Career and Technical Education Act of 2006. Vocational education emerged in the mid-1950s with a fusion of science-based practices, supervised occupational experience, and leadership development. Enrollment in vocational, technical and career education grew at increasing rates until the mid 1980s. There have been decrease-increase enrollment cycles over the past 30 years with total school enrollment at an all-time high today.

Career and Technical Education’s Role Today

The present functions of education embrace the cardinal principles of education (Bureau of Education, 1918) and include personal growth, knowledge, citizenship, careers, ethics and productive use of time. The design of career and technical education (CTE) programs incorporates three forms of practice: formal classroom and laboratory; informal supervised experience; and relational leadership skills.

The program philosophy embraces the axiom, “learning to do—doing to learn—earning to live—living to serve.” Another set of principles or descriptors for today’s programs says that the programs must reflect rigor, relevance and relationships. It is easy to attach rigor to the classroom and laboratory instruction, relevance to the informal out-of-class experiences of our students, and relationships to the youth development organizations available to our students. In reality, however, all three components of the program should have characteristics and components that imbue rigor, relevance and relationships.



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THE DESIGN OF CAREER AND TECHNICAL EDUCATION (CTE) PROGRAMS INCORPORATES THREE FORMS OF PRACTICE: FORMAL CLASSROOM AND LABORATORY, INFORMAL SUPERVISED EXPERIENCE, AND RELATIONAL LEADERSHIP SKILLS.

Forecasting Trends

Like a map that connects theory to practice, Shulman (2002) described a framework for learning that includes six elements: (1) engagement and motivation, (2) knowledge and understanding, (3) performance and action, (4) reflection and critique, (5) judgment and design, and (6) commitment and identity. This dynamic mix describes education. Shulman (2002) noted, “We often talk about our work as

attempts to provide mirrors and lenses that can assist others to pause, reflect and see their work differently as they move into a next stage of activity.” Thus, one step in the solution of the dilemma—integrating classroom, laboratory, leadership and experiential learning into a sequenced framework.

As rapid changes occur in the emerging knowledge society that Friedman (2005) called “Globalization 3.0,” there

is a need to balance fundamental and powerful principles with the new knowledge base. CTE provides an environment to achieve such a synergistic balance between best theory and best practice.

If it is Good for the Gosling, is it Also Good for the Goose?

As teachers, we want the best for our students—knowing that “best” means different things for different students. However, the last thing we want is more things on our plate. So, how can we leverage the four stepping-stones of a student’s career pathway into a single, manageable program and still have a life?

Remember Shulman’s (2007) six ele-

ments to learning? Good classroom and laboratory instruction is the foundation stone for student and teacher success. It leads to knowledge and understanding (element 2). Student engagement leads to intrinsic motivation (element 1) that connects to meaningful experience. As a teacher, if you can accomplish that, life is good. A sequenced growth plan of super-

vised experience outside the classroom and laboratory connects the lesson with the work—element 3, performance and action. As a part of graded class work, students can begin with an early shadowing interview with a craftsman—much like Adam Smith's mentor-apprentice. As these experiences are completed, you as the teacher must help students

to pause for a moment in their activities so that they can reflect on those activities and analyze them (element 4) so that they become true learning experiences. These initial experiences can evolve into a formal placement agreement allowing the student to acquire bona fide experiences that count in the workplace. Also, students exercise judgment and create designs (element 5) as they engage in deeper and more meaningful experiences

INCREASINGLY, CTE IS RECOGNIZED AS A CRITICAL ELEMENT FOR PERSONAL SUCCESS AND WELL-BEING. AT THE SAME TIME, EDUCATION IS BEING MORPHED FROM GROUP TO INDIVIDUAL LEARNING EXPERIENCES.

with more responsibility, critical thinking and decision-making requirements. Some students will expand their responsibilities and take on entrepreneurial jobs that lead to money for further education or for their own business. Some may pursue research and experimentation. This leads to and demonstrates commitment and identity (element 6).

Employers are looking for employees with solid personal traits as well as technical knowledge and skills. Leadership skills—problem solving, personal ethics, time management, interpersonal skills, and organizational skills—are needed for success in today's economy. Our youth CTE organizations—DECA, FBLA, FCCLA, FFA, HOSA, SkillsUSA, TSA—provide opportunities for leadership development, service learning and career exploration. More work for you? Yes, but as an "adviser-manager," you will find a wealth of community volunteers who will assist you and your students in activities.



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A Changing World

We live in a changing world that sometimes, like the transformation of seasons, seduces us into summer complacency. Yet, when confronted with rapid change, enduring principles of nature and nurture remain. Increasingly, CTE is recognized as a critical element for personal success and well-being. At the same time, education is being morphed from group to individual learning experiences. Technology will play an increasing role in work and education. Collectively, we understand and value practice as a means of improving performance and the need for a sequential experience that builds from engagement to commitment and identity.

Our knowledge base is growing exponentially. Drucker (2003) coined the term knowledge worker in 1959; today knowledge workers outnumber all other types of workers in America by a four to one margin. Henderson (2005) forecasted, "Knowledge has become the new premium fuel for economic growth in the 21st century" (p. 1). The future of the fusion of knowledge, experience and career development is bright if we can leverage the three functions—formal classroom and laboratory; informal supervised experiences; and relational leadership. The three functions allow and even ensure rigor, relevance and relationships. There is a community of willing boosters that are interested in your students' success. **T**

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